AMENDMENTS TO THE SPECIFICATION:

Please amend the specification as follows:

Please amend the paragraph [0036] as follows:

According to the mode of the invention, the first compound semiconductor layer, the second semiconductor layer and the third semiconductor layer may also be p-type doped. Be, Zn, C, Mg, [[or]] Cd or Ge is used as a preferable p-type dopant. In this case, the doping density is the density of the impurity atoms doped in a compound semiconductor. The p-type doping density is 1×10^{16} to 1×10^{17} atoms/cm^3, and more preferably, 2×10^{16} to 5×10^{16} atoms/cm^3.

Please amend the paragraph [0044] as follows:

The elements previously described can be used for a p type dopant. Si, Sn, Te, S, Se [[or Ge]], etc., can be considered preferable for an n type dopant. Fig. 5 is a cross-sectional view of an example compound semiconductor sensor 2 wherein a stacked layers 12 formed of compound semiconductors is deposited on an n-type GaAs substrate 6 (electrodes 13 are not shown). In the example shown in Fig. 5, the compound semiconductor stacked layers 12 includes three layers, a high-density n-type doped layer 12a/a low-density p-type doped layer 12b/a high-density p-type doped layer 12c.

Please amend the paragraph [0090] as follows:

Furthermore, Si, Te, Sn, S, Se, [[Ge,]] etc., can be used as an n-type dopant. Since, above all, Sn has a higher activation ratio relative to InSb, and can reduce sheet resistance, Sn is more preferably used. Further, Be, Zn, Cd, C, Mg, etc., can be used as a p-type dopants. Since above all, Zn has a higher activation ratio relative to InSb

and is less poisonous, Zn is more preferably used. Further, Be, Zn, Cd, C, Mg, etc., are preferably used as p-type dopants for the ninth compound semiconductor layer 21. Above all, Zn is preferable because the activation ratio relative to InSb is higher and the toxicity is low. Furthermore, the p-type doping density is preferably equal to or higher than 1×10^{18} atoms/cm^3 in order to obtain a small resistance at the film.

Please amend the paragraph [0095] as follows:

Further, Be, Zn, Cd, C, Mg, Ge etc., are preferably used as p-type dopants for the ninth compound semiconductor layer 21. Above all, Zn is preferable because the activation ratio relative to InSb is higher and the toxicity is low. Furthermore, the p-type doping density is preferably equal to or higher than 1×10^{18} atoms/cm^3 in order to obtain a small resistance at the film.